

**Testimony of**  
**Ms. Linda Figg**  
**President/CEO, Figg Engineering Group**  
**Representing the**  
**Construction Industry Round Table (CIRT)**  
**to**  
**U.S. House of Representatives**  
**Subcommittee on Regulatory Affairs, Stimulus Oversight and Government Spending**  
**Hearing on March 16, 2011**  
**“Regulatory Impediments to Job Creation:**  
**The Cost of Doing Business in the Construction Industry”**

**Time to Unleash America’s Spirit and Innovation to Spur Economic Activity:**  
**The New I-35W Bridge Case Study**

America’s “can-do-spirit”, “know-how” and “innovation” still exists, it’s just hard to find sometimes under the extensive laws, regulations, and rules that the private sector faces when trying to create jobs that spur economic growth and expansion. The uncertainty and unintended consequences of what seems like a never ending expansion of government’s reach damages the entrepreneurial spirit and desire to take risks – which can help jump start a robust recovery. When government gives private businesses more freedom, not less, remarkable achievements can be accomplished to enhance prosperity for Americans.

The American public has indicated, with an amazing 81 percent agreeing that the government “needs a basic overhaul” and should undertake “an annual ‘spring cleaning’ to eliminate unnecessary regulations and red tape;” according to a recent Clarus Research Group poll.

So let’s begin with where the federal government spends taxpayer money to put people to work, create economic growth, improve America’s global competitiveness and enhance community quality of life – namely, public works/infrastructure projects. Right now, dollars allocated to be spent on these projects are subject to time consuming and often redundant rules which weigh down efficiencies and delivery times, while increasing costs. [See, Attachments A & B for the affect “red tape” has on costs/time, and the resulting dilatory impact on jobs]. These excessive procedures could be accomplished without unnecessary delays and costs. A good example is the new I-35W Bridge replacement project.

**Time of Tragedy/Time of Renewal** – August 1, 2007, was the tragic day when the bridge carrying I-35W over the Mississippi River in Minneapolis suddenly collapsed during rush hour traffic, killing 13 and injuring many more. While rescue efforts proceeded, the Minnesota Department of Transportation (MnDOT) immediately began a fast-track process of building a new bridge. Three days after the collapse, a Request for Qualifications was issued for design/build teams interested in the replacement contract, with five teams shortlisted four days later. Technical and price proposals were received on September 14<sup>th</sup> and evaluated on a best-value basis by 27 evaluators from five agencies, considering both quality and overall price. The selected design/build team of Flatiron-

Manson with FIGG was awarded the contract on October 8, 2007, just a little over two months after the accident.

To allow construction to commence so quickly, MnDOT developed strong relationships with permitting agencies. With good will and a sense of common mission, MnDOT and the agencies agreed to make and keep reasonable commitments. Decisions that normally take months and years had to be made in hours and days. Through this team effort, a project memorandum was issued covering the environmental management issues and permitting the \$234 million construction project to move forward.

Construction of the new 10-lane bridge proceeded at an accelerated pace utilizing a local workforce estimated at over 600 tradesman and laborers, with the 504' main span over the Mississippi River erected in just 47 days. On September 18, 2008, the new bridge opened to traffic more than three months early. The design and construction of this important interstate link serving 141,000 vehicles per day was completed in just 11 months. This was only possible due to the spirit of cooperation and teamwork between MnDOT and the permitting agencies to eliminate roadblocks often encountered in the environmental and permitting phase of the project, while still providing a sustainable eco-friendly bridge that the community is proud of.

From notice-to-proceed with construction to opening to traffic was 339 days. The private sector was given the freedom to enhance project quality, introduce innovations and engage the community in selecting some of the bridge's dominant visual features. The bridge highlights innovation with "smart bridge" technology – 323 sensors that provide long term valuable information on the bridge. Landscaping provided better drainage, nano-technology concrete cleans pollution from the air and LED highway lighting (a first) cuts the cost of energy and maintenance.

The full story of this project is found in the attached book "Bridging the Mississippi: The New I-35W Bridge, Minneapolis, Minnesota".

**Lessons Learned** – The experiences from the new I-35W Bridge replacement could be left to just one project, never to be repeated and studied. Or we can take to heart the clear unmistakable lessons we've learned and put them to work across the board on a whole myriad of public projects so that America gets the benefits of efficient, science-based and cost/time sensitive regulations in a manner that gets important infrastructure built while still protecting and caring for our environment.

To expect the U.S. economy to expand and become robust through government intervention and excessive regulations, is to expect something that "never was and never will be" – to borrow from a wise Thomas Jefferson comment about a nation that cannot be ignorant and free. Private industry when given more freedom can achieve amazing results to build a stronger America. It's time to inspire the recharging of the American spirit to help us grow into a strong economy.



## **Construction Industry Round Table**

### Attachments:

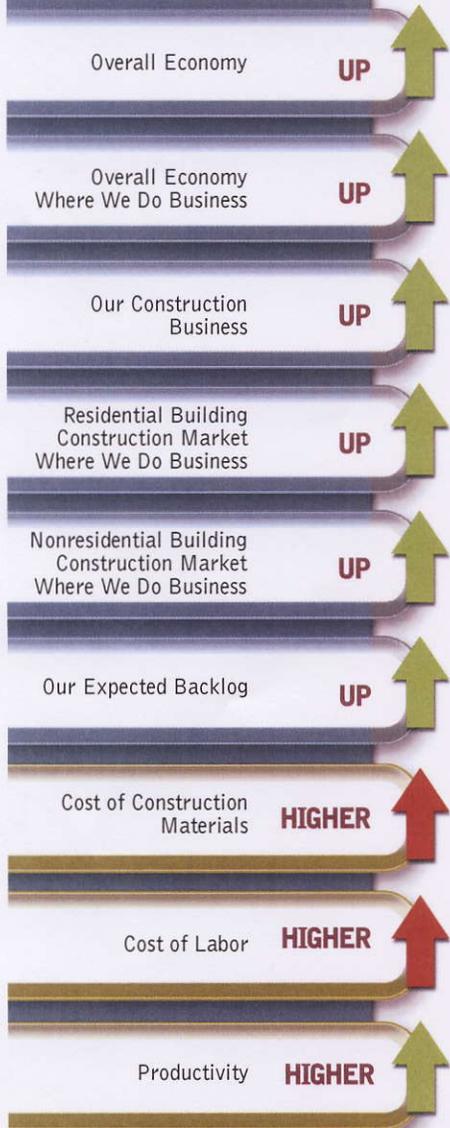
A – CIRT Sentiment Index 1<sup>st</sup> Q 2011 Summary

B – Infrastructure Job Creation and Economic Activity

C – Linda Figg Bio

D – The New I-35W Bridge Book

## CURRENT CIRT SENTIMENT INDEX SUMMARY

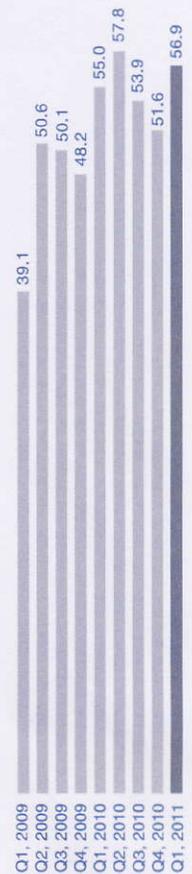


## CIRT SENTIMENT INDEX FIRST QUARTER 2011 EXECUTIVE SUMMARY

The CIRT sentiment index moved up solidly this quarter to 56.9 from 51.6 last quarter, still not above its high of 57.8 in the second quarter of 2010, but in positive territory for five quarters now. This signals a slow, somewhat uneven recovery, but a recovery nonetheless. For the first time in this report, we added a new section of our index to gauge the activity in the engineering and design sector of the industry, the "Design Index." Since many CIRT member companies engage in design and construction activities, this addition will give a more rounded representation of the membership serving as panelists and possibly a forecast of follow-on construction strength in particular areas. Our first reading for this section of the index is 55.2, or commensurate with the current CIRT Sentiment Index results. Strong components of the engineering and design index include consulting, planning and international work. At the same time, the strength in these particular design index components may also give some insight into why construction portions of the index, such as commercial, health care and education, are slow to recover. In short, the strong design components are not signaling strength in the aforementioned major construction segments as of yet.

For current issues this quarter, we look at some hot topics, regulatory "red tape," jobs and panelists' opinion of the election results. One of the hottest issues in government these days, after the budget and jobs debates, is the topic of addressing and reducing regulatory red tape. Contractors, especially those who do a lot of work in the public sector, have been dealing with these issues for a long time. We asked them to give us some idea how much red tape affects losses of time and money on projects, and most said they have experienced at least a 5% loss of time or costs due to delays caused by red tape. Their responses are detailed below, but to be sure, even those seemingly small delays cost the industry billions of dollars a year, and many panelists have experienced even greater delays.

On a positive note, even though the CIRT Sentiment Index has increased slowly this quarter, the consistent improvement is enough for more panelists to increase their hiring plans for 2011, as 54% plan to hire up to 5% more salaried staff. This is another good sign we are moving away from the recession and planning for better times.



	CURRENT CIRT SENTIMENT INDEX READING Q1-2011	<b>56.9</b>
<b>NEW</b>	CURRENT CIRT DESIGN INDEX READING Q1-2011	<b>55.2</b>
	PREVIOUS SENTIMENT INDEX READING:	51.6

### EXHIBIT 1

CIRT Sentiment Index  
Scores Since Inception: Q1, 2009 to Q1, 2011

(Scores above 50 indicate expansion, below 50 indicate contraction)

## CURRENT ISSUES

### Delays and Costs Due to Regulatory “Red Tape”

The term “red tape,” is considered derogatory and covers a broad array of regulations and paperwork usually required by a government regulatory agency. Checking Wikipedia, you will find the term has been used for centuries to describe the red ribbon or tape used to bind stacks of legal documents. Knowing the historic use of the term, we can be certain that it will not go away anytime soon. The current focus on red tape in Washington and by some state and local governments around the country is spurred on by growing deficits, growing bureaucracy and the need to assure small businesses and taxpayers that governments are doing all they can to reduce what is often referred to as the “hidden tax.” Last quarter we asked panelists how the recession had changed their companies and operations. We heard how companies have worked to become leaner and more productive, often a painful but necessary undertaking. There now appears to be a growing awareness across the country that governments (federal, state and local) need to take the same steps that businesses have been forced to take to survive. Therefore, for the first quarter of the new year, we asked panelists to tell us of some of their experiences with respect to regulatory red tape on design and construction projects.

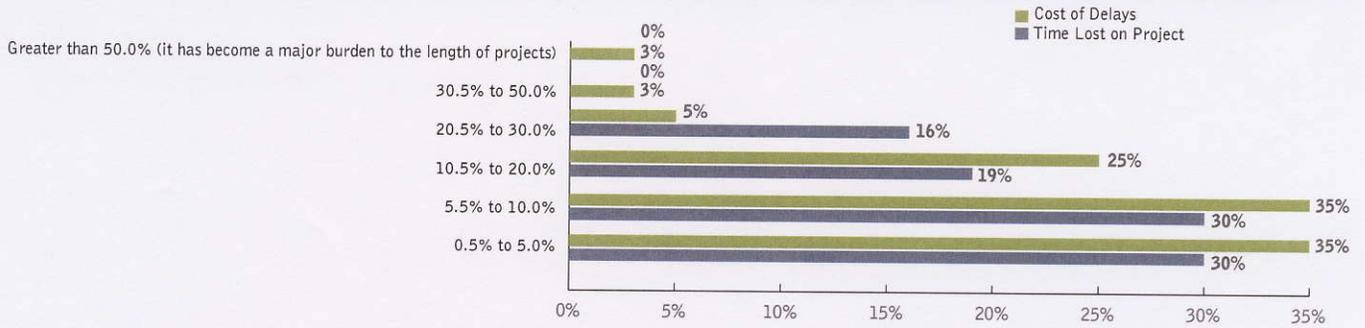
In a survey in 2006 on the topic of multiuse, urban-infill projects, we found that a developer or builder should expect to spend 2.5 to three years in the approval, zoning and permitting process when evaluating a high-density project. Therefore, notwithstanding a gradual recovery, it is not hard to see that there are some regulatory impediments to overcome before the industry is back to full speed, even if banks are ready to lend again. For our first quarter survey, 30% of panelists said they experienced a loss of 5.5% to 10% of time on projects due to regulatory red tape. Thirty-five percent said regulatory delays cost 5.5% to 10.0%, on average, for a typical project. While these numbers don't appear alarming at first — and a significant percentage of panelists reported higher numbers — when one considers that, if even half of that lost time and cost were unnecessary (although one may contend all of it was unnecessary), **the losses to the economy range in the billions of dollars each year.** That means not only fewer people working, but also displacements to potential end-users, such as: more overcrowded schools, road congestion, etc., as well as economic expenses from delayed infrastructure improvements that may result in higher costs to producers, merchants, owners, consumers and/or taxpayers.

To get more detail about the losses due to regulatory red tape delays on construction projects, we asked panelists to estimate the differences in costs and time lost in the design and construction phases. As might be expected, in the design phase, the loss is greater in time, according to 49% of panelists. On the other hand, according to 35% of panelists, the construction phase suffers greater financial costs. In both cases, of course, time always relates to costs; but when the concrete is poured, and the cranes are going up, unnecessary delays tend to get very expensive.

Is it possible that these problems could be fixed or delays and red tape reduced? We asked if panelists had ever had experience on projects that addressed red tape and found a way to streamline the process without sacrificing important underlying reasons for the regulations. Sixty percent said “no,” but an encouraging 30% said “yes.” Some of their comments and advice are reproduced below; but it is clear there are some good examples of collaborative team efforts among all the parties involved in the construction process to get things done better and reduce red tape.

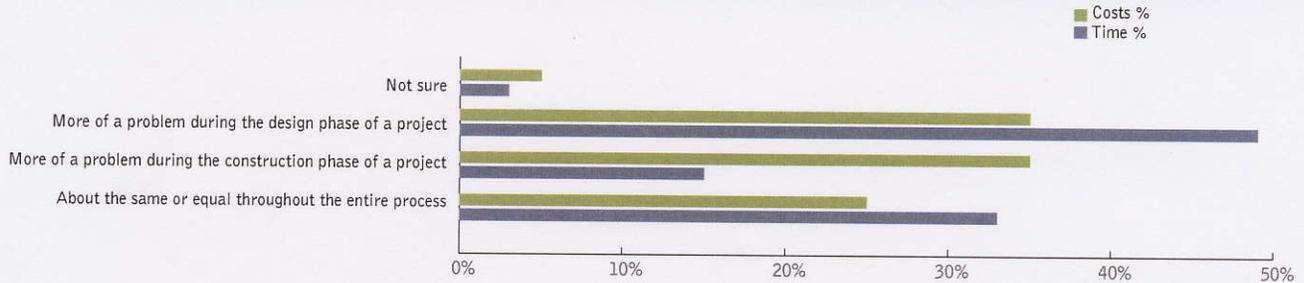
**EXHIBIT 3**

In TIME and COST, what would you estimate are the losses (design through construction) due to delays caused by regulatory red tape? (Red tape includes redundancies, inefficiencies, overlapping jurisdictions.)



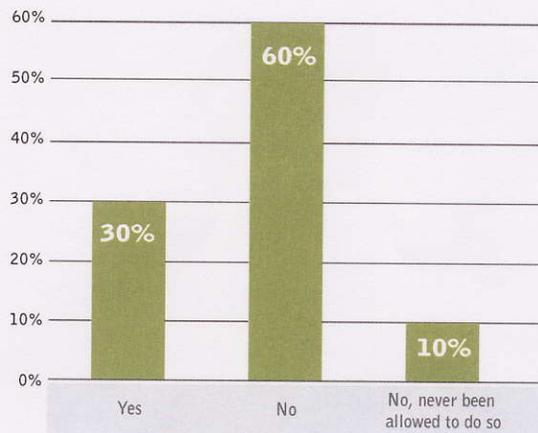
**EXHIBIT 4**

Related to TIME and COSTS, how do the regulatory impacts you identified above compare between the design phase vs. the construction phase of a project?



**EXHIBIT 5**

Are you aware of, or participated on, any significant projects that addressed "red tape" issues and found a way to streamline the process so as to bring the project in on time (or better) and on budget (or better) without sacrificing important underlying reasons for the regulatory process?



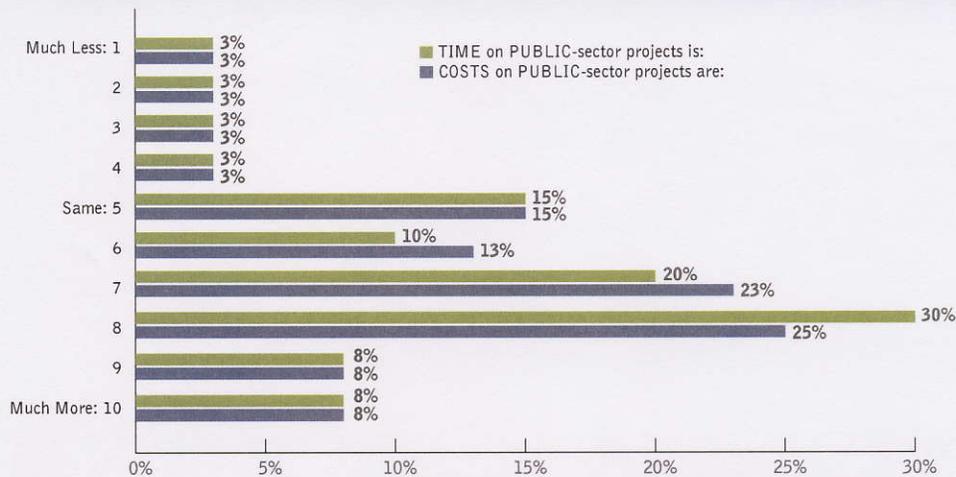
*If “yes,” please provide the project name and some brief details about the project(s) you are familiar with regarding streamlining.*

### **Comments:**

- On a project we have in Virginia that is private, we have shaved years off the usual schedule.
- The city of Pontiac went bankrupt. We didn't have a planning and engineering department to review plans and make inspections. We went to a neighboring town and paid it to do the reviews and inspections required. Downside, we paid twice for the work—the first time to Pontiac when we applied for the building permit and the second time when we had to pay the neighboring town. This is going to become a problem as the financially weak municipalities struggle with bankruptcy or receivership.
- Early engagement of public officials in ways that was new to the agency and design team. Staff reductions at many public agencies have necessitated new ways of approaching entitlement/approval processing.
- Flowermound Hospital, Flowermound, Texas. Integrated project delivery, lean design and lean construction techniques.
- Had a liaison with the city to work through all permit problems
- I-15 Salt Lake City, first highway design-build project for 2002 Olympics. I-405 widening in Los Angeles: first Caltrans design-build project (awarded by LAMTA, because it has the legal ability to do design-build). Project was awarded without full financing. I-35W bridge streamlined all processes because it was an emergency replacement, and all agencies agreed to work together with efficiency.
- I-35W reconstruction in Minneapolis, fast-track D/B best value. Canadian P3 projects in western Canada.
- New Orleans flood control projects. The USACE used various procurement methods to cut time, reduce costs and improve quality. D/B and ECI (early contractor involvement) were used fairly successfully.
- On the Tampa Bay History Center, in Tampa, Fla., the mayor's office was contacted by the construction and owner's team prior to the start of the project and asked to give the project an “expedited process” for overcoming problems that might be encountered.
- Projects that involve owner partnering and direct involvement.

## EXHIBIT 6

In your estimation, how do public-sector projects compare in general with private-sector projects when it comes to issues concerning regulatory red tape?



## Hiring Plans for 2011

When we asked panelists about their expectation for hiring in 2009, we were not too surprised to learn most expected to downsize at the height of the recession. Nonetheless, the amount of staff reduction was alarming. In 2010 we saw more of the same, as industry employment dropped by 20% or more since the beginning of the recession. In 2011 we can expect some pockets of downsizing to continue, but the downward trend for employment is beginning to show definite signs of reversal, as 54% of panelists expect to increase full-time, salaried staff by up to 5% in 2011, and 17% expect to add up to 10% more salaried staff.

The signs that the industry is hiring more than firing bode well for the turnaround. However, new hiring is by no means a move just to increase the number of warm bodies on staff, as it seemed to be back in the boom times. It also does not mean all those let go will just return to work; some may have found work elsewhere or stopped looking for work by now. Of planned new hires, only 17% are expected to be rehires. Even if business does not pick up as fast as some expect, 29% of our panelists said there is always room for exceptional individuals. New hiring will be for very specific positions, adding staff due to plans to enter new markets (24%), and only when the current staff is consistently at or above 100% capacity, according to (18%) of panelists, or assuring the right people are in place for management succession plans (12%).



## Construction Industry Round Table

### Infrastructure Job Creation and Economic Activity

#### Introduction

Contentions regarding the job creation and economic activity stimulated from infrastructure expenditures have been studied for some time by a number of independent and even government entities over the years. And while the findings are not always 100% consistent, they are all in agreement that some level of job creation and economic activity is “supported” by infrastructure expenditures.

#### Red Tape’s Impact on Jobs

Applying the cost findings in Attachment A to the FHWA federal government study on the number of construction workers that are directly affected or “supported” by \$1.0 billion in spending results in a rough approximation of the dilatory impact red tape has on jobs.

*11,921 jobs per \$1.0 billion in spending = **941,759 jobs** affected (or are lacking support) due to regulatory “red tape.”* [That is: 10% of \$790 billion dollars in overall Jan.’11 construction spending, or 79 x 11,921].

Even if one assumes a very conservative estimate as to the exact number of jobs not being supported (or possibly created) it still amounts to potentially 100s of thousands of positions that could have been sustained in a more efficient atmosphere.

Unfortunately, the costs due to regulatory inefficiencies are not isolated to only public sector projects – but, have spread into even *private* sector work that has been burdened with similar “red tape” in order to meet the requirements of government. [See, Exhibit 6, Attachment A for details].

#### USDOT/FHWA Study

“*Employment Impacts of Highway Infrastructure Investment*” (Updated 4/2008) is a recent study in which the USDOT/FHWA revised earlier reports by using new computer simulation results from their internal 1997, 2005 and 2007 figures. The new release indicates that the latest estimate of job impacts is **34,779 per billion dollars** (not the earlier USDOT study’s 47,500 figure).

<b>Impacts of \$1,000,000,000 Federal Expenditure with 20% State Share 1997, 2005 and 2007 (2007 dollars)</b>			
	<b>1997</b>	<b>2005</b>	<b>2007*</b>
Construction Oriented Employment Income	\$736,704,000	\$536,053,016	\$493,517,797
<b>Construction Oriented Employment Person- Years</b>	<b>19,584</b>	<b>12,572</b>	<b>11,921</b>
Supporting Industries Employment Income	\$278,221,000	\$240,940,000	\$218,834,879
Supporting Industries Employment Person- years	6,939	5,604	5,405

Induced Employment Income	\$681,478,000	\$685,193,000	\$615,113,374
Induced Employment Person-years	21,052	18,311	17,453
Total Employment Income	\$1,696,406,000	\$1,462,188,000	\$1,327,466,049
<b>Total Person-years</b>	<b>47,500</b>	<b>36,488</b>	<b>34,779</b>

- Preliminary

About the use of the job employment and income figures:

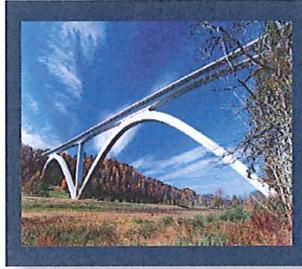
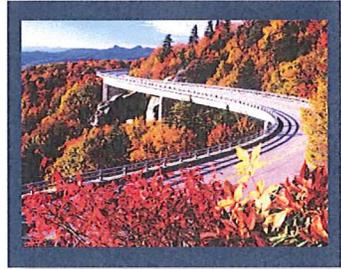
- The FHWA analysis refers to jobs *supported* by highway investments, not jobs *created*;
- The distinction needs to be made between jobs directly related to highway construction -- about one-third of the total jobs -- and the supporting industries' and induced employment jobs.



## LINDA FIGG

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Linda Figg is President/CEO of Figg Engineering Group (FIGG), a family of companies that specializes in creating world-class bridges by blending an engineer's passion with the sensitivity of an artist.

FIGG customers have received 324 design awards for their bridges, including three Presidential Awards through the National Endowment for the Arts: the Sunshine Skyway Bridge, Florida; the Blue Ridge Parkway Viaduct, North Carolina; and the Natchez Trace Parkway Arches, Tennessee. These bridges are pictured on this page. (This national honor has been awarded to only five bridges.)

Linda's father, Gene Figg, founded the firm in 1978. Sharing her father's passion for beautiful bridges, she joined the firm four years after its formation. In March 2002, Linda became President and owner of FIGG, taking over the reins from her father.

With construction values totaling \$10 billion, FIGG bridges have been completed, are under construction or being designed in 38 states. Many of these extraordinary bridges have set new industry standards in design, technology, materials, constructibility and efficiency. FIGG-designed bridges have been heralded on the covers of over 200 publications, most notably on 13 covers of the prestigious *Engineering News-Record*. FIGG bridges have also been featured on the front page of *USA Today*, and in seven documentaries on The History Channel series (five Modern Marvels shows since 1999) and PBS Nova.

Linda, a Civil Engineering graduate of Auburn University, has over 29 years of experience in leadership and management of bridges from concept through construction on first-of-a-kind bridges. She is experienced in all aspects of bridge development, including design, project management, innovative financing, construction engineering and public involvement. She pioneered the FIGG Bridge Design Charette™ process for unique community involvement and has facilitated over 200 public workshops for the development of world-class bridges.

*Engineering News-Record* honored her as one of the 22 Newsmakers of 1998 who served the best interests of the construction industry. ENR described Linda as "a relentlessly energetic diplomat...she also devised an innovative approach that allows local citizens to vote on a preferred bridge design, promoting seldom seen enthusiasm among officials and residents."

(counter clockwise)

I-275 Sunshine Skyway Bridge, FL

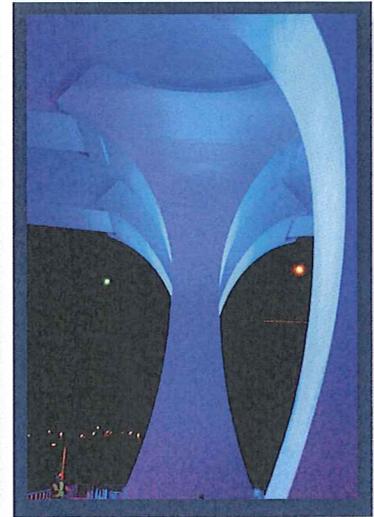
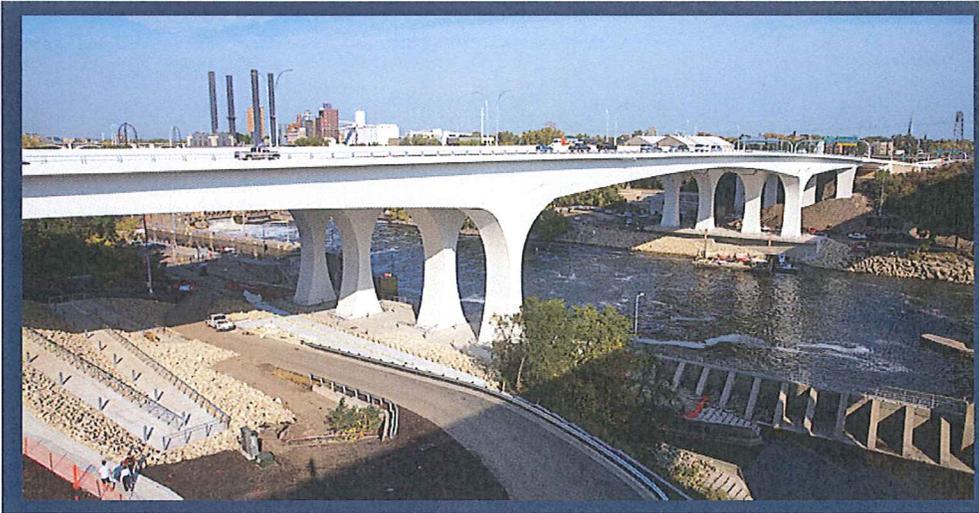
Blue Ridge Parkway Viaduct, NC

Natchez Trace Parkway Arches, TN



CREATING BRIDGES AS ART®

January 2011



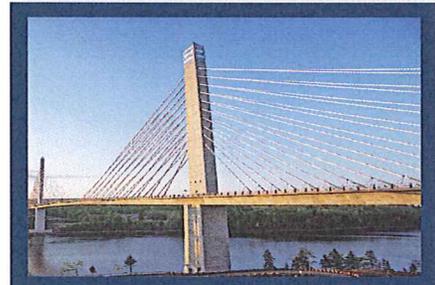
Innovative financing of bridges that have no money is a specialty of Linda's and the firm. An example is the 3.6 mile long Mid-Bay Bridge in Destin, Florida, that was accomplished without local, state or federal funding or backing. \$81 million was financed solely on the support of tolls for this new corridor projecting 5,000 vehicles per day. Bridge opened in June 1993.

To stimulate interest in bridge design and promote engineering among young people, Linda produced an educational DVD titled "Big Cable Bridges – How did they do that?" The video and companion teacher's guide have won five awards for their contribution to the education of children.



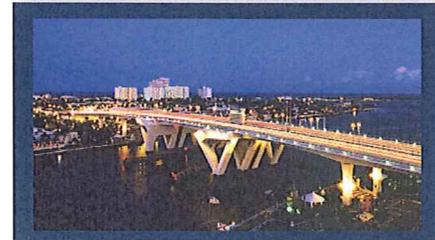
The Broadway Bridge in Daytona Beach, Florida is an example of FIGG's community involvement process for creating an award-winning bridge design. As Project Director, Linda facilitated community design charettes that resulted in signature aesthetic features, leading the *Orlando Sentinel* to describe the bridge as "Daytona Beach's Newest Permanent Art Exhibit". This beautiful, popular work of art has received eight design awards, including the 2002 Gustav Lindenthal Medal at the International Bridge Conference.

Linda served as Chairman of the Construction Industry Round Table (CIRT), an advocacy group comprised of 100 CEOs of America's leading engineering, architectural and construction companies; former board member of the American Road & Transportation Builders Association; and the Vice-Chairman of the American Segmental Bridge Institute. She received Auburn University's Engineering Achievement Award in recognition of exemplary achievements (2006) and was named in Concrete Construction magazine's list of the most influential people in the concrete industry in 2007. In 2010 Linda was inducted in to the Alabama Engineering Hall of Fame.



Linda's leadership during the community involvement process also helped the Maine Department of Transportation arrive at a unique design for the Penobscot Narrows Bridge & Observatory for this emergency replacement. The multi-story public observatory on top of one 420' tall pylon is the tallest public observatory in the world. The project has received 20 design awards for innovation and aesthetics.

Linda authored the chapter on bridge aesthetics for the new edition of the Concrete Construction Handbook and was the keynote speaker for the Vecellio Distinguished Lecture at Virginia Tech on "Creating Bridges as Art®".



Linda's community service includes Children's Miracle Network Community Board (former president), the Tallahassee Memorial Hospital Foundation Board and the American Heart Association Tallahassee Chapter Board. She is an active volunteer, along with many other FIGG team members, in Habitat for Humanity. The firm has funded and built five homes through the Habitat program.

Linda was the Visual Quality Manager for the design of the new I-35W Bridge in Minneapolis. She was responsible for all the visual aspects of the bridge and entire project. The new bridge was designed and built in 11 months. It is a modern concrete bridge that serves as an example for the future of American Bridges.

I-35W Bridge, MN  
 Broadway Bridge, FL  
 Mid-Bay Bridge, FL  
 Penobscot Narrows Bridge & Observatory, ME  
 17th Street Bridge, FL

Committee on Oversight and Government Reform  
Witness Disclosure Requirement – “Truth in Testimony”  
Required by House Rule XI, Clause 2(g)(5)

Name: **Linda Figg**

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1. Please list any federal grants or contracts (including subgrants or subcontracts) you have received since October 1, 2008. Include the source and amount of each grant or contract.

None directly with the Federal Government.

Our contracts are with State and Local Governments and Authorities who sometimes use Federal Funding.

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2. Please list any entity you are testifying on behalf of and briefly describe your relationship with these entities.

Linda is testifying on behalf of Construction Industry Round Table (CIRT) [IRC 501c(6)] as its elected Chairperson.

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3. Please list any federal grants or contracts (including subgrants or subcontracts) received since October 1, 2008, by the entity(ies) you listed above. Include the source and amount of each grant or contract.

See response to 1. above.

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*I certify that the above information is true and correct.*

Signature:

Date:

  
Linda Figg  
President / CEO  
Figg Bridge Engineers

March 14, 2011